

CLAIMS

1. A nitride semiconductor light emitting device comprising:
a plurality of nitride semiconductor layers having an active layer that
5 generates light through recombination of electrons and holes; and
an electrode layer disposed on the plurality of the nitride semiconductor
layers, the electrode layer being electrically in contact with the plurality of the
nitride semiconductor layers,
wherein the plurality of the nitride semiconductor layers include a
10 p-type nitride semiconductor layer formed using ammonia together with
hydrazine-based material as nitrogen precursor.

2. A nitride semiconductor light emitting device comprising:
a plurality of nitride semiconductor layers having an active layer that
15 generates light through recombination of electrons and holes;
an electrode layer disposed on the plurality of the nitride semiconductor
layers, the electrode layer being electrically in contact with the plurality of the
nitride semiconductor layers; and
the plurality of the nitride semiconductor layers including a p-type
20 nitride semiconductor layer formed using as nitrogen precursor ammonia
together with hydrazine-based material which generates a radical upon thermal
decomposition, and the radical being combined with a hydrogen radical to
eliminate the hydrogen radical.

3. The nitride semiconductor light emitting device of claim 2, wherein the electrode layer is made of at least one selected from the group consisting of nickel, gold, silver, chrome, titanium, platinum, palladium, rhodium, iridium, aluminum, tin, ITO, indium, tantalum, copper, cobalt, iron, ruthenium, zirconium, tungsten, lanthanum and molybdenum.

4. The nitride semiconductor light emitting device of claim 2, wherein the plurality of the nitride semiconductor layers includes an n-type nitride semiconductor layer in contact with the electrode layer.

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5. The nitride semiconductor light emitting device of claim 4, wherein the electrode layer is made of ITO (Indium Tin Oxide).

6. The nitride semiconductor light emitting device of claim 2, wherein the p-type nitride semiconductor layer is doped with a dopant and the dopant is magnesium (Mg).

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7. The nitride semiconductor light emitting device of claim 2, wherein the p-type nitride semiconductor layer is made of GaN.

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8. The nitride semiconductor light emitting device of claim 2, wherein the radical generated upon the thermal decomposition of the hydrazine-based material is CH_3 or NH_2 .